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Director, ICAR-CIPHET
P.O. PAU Ludhiana-141004 (Punjab)
Ph. No. 0161-23131103, 2313116
Fax: 0161-2308670
Website: <https://ciphnet.icar.gov.in/>
E-mail: hdot.ciphnet@icar.gov.in
icarciphnetnewsletter@gmail.com

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Editor in-Chief

Dr. Nachiket Kotwaliwale
Director, ICAR-CIPHET

Editors

Dr. Armaan U. Muzaddadi
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Pr. Scientist & I/c PME
Dr. Khwairakpam Bembem
Scientist, TOT Division
Dr. Renu Balakrishnan
Scientist, TOT Division

Assisted by

Ms. Pragya Singh, TA
Dr. Navjot Kaur, YP-II

Cover page: ICAR North Zone Sports
Tournament and International Women's Day
Celebration and

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From the Director's Desk

Dear Colleagues and Friends,

It is with great pleasure that I share the first quarterly newsletter of 2024, highlighting the vibrant activities and achievements of our institute over the past few months.



One of the most exciting events we organized was the ICAR-North Zone Sports Tournament. This year, we saw an impressive turnout with twenty-four teams and a total of 900 participants, making it one of our largest and most successful tournaments. The enthusiasm and sportsmanship displayed by all participants were truly inspiring. Congratulations to all the teams for their spirited participation and to the winners for their remarkable performances. Such events not only foster a healthy competitive spirit but also strengthen the bonds within our ICAR community.

On the technological front, our institute continues to make significant strides. Three patents were granted to ICAR-CIPHET technologies. Our AICRP centres have developed several innovative technologies aimed at enhancing post-harvest processing and sustainability. These advancements reflect our ongoing commitment to research and development in agricultural engineering. Our dedicated team has worked tirelessly to bring these technologies from the conceptual stage to practical applications, ensuring they meet the needs of our stakeholders and contribute to the broader goals of agricultural development.

A number of extension activities- awareness programmes, trainings, exposure visits of farmers/ students were also undertaken during this period. The dedication and hard work of our scientists, staff, and collaborators are the driving forces behind these achievements. I extend my heartfelt gratitude to everyone for their unwavering commitment and contributions.

As we move forward, let us continue to innovate, collaborate, and excel in our endeavors. Together, we can make 2024 a year of remarkable progress and success for our institute and the agricultural community.

Ludhiana, 2024

(Nachiket Kotwaliwale)
Director, ICAR-CIPHET

RESEARCH HIGHLIGHTS

Desiccant dehumidifier with control panel

Typically, during the storage of perishables in cold storage, the relative humidity inside the storage increases to 90-95% due to changes in physiological activities such as transpiration and respiration. However, certain agricultural commodities require storage at a relative humidity of 60-70%. To address this need, a desiccant-based dehumidifier is necessary to reduce the moisture in the cold air from the storage room, as this type of dehumidifier can operate at low temperatures below 5°C. So, a desiccant dehumidifier was developed and fabricated to be incorporated with the cold storage chamber to maintain relative humidity within the 60-70% range.

The desiccant dehumidifier features a rotary wheel with sinusoidal flow passages coated with silica gel, two centrifugal fans with flow rates of 350 m³/h and 760 m³/h for the process air section and regeneration air section, respectively, and a heater bank at the inlet of the regeneration section to increase the air temperature to between 60-100°C. The moisture removal capacity of the desiccant dehumidifier ranges from 5-7 kg/h at 60°C and 60-90% RH.



Desiccant dehumidifier with control panel

Mathematical Modelling of Frying Process

Understanding the drying behaviour of a product during frying is crucial, and the best way to achieve this is through the study of moisture loss and oil absorption kinetics. Mathematical modelling is an effective tool that can be used to predict the outcome of a frying process. The investigation was carried out to study the kinetics of moisture loss and oil uptake during vacuum frying of potato fries. Vacuum frying of potato fries of size 65×7×7 mm was carried out in an indigenously developed table-top vacuum fryer at a temperature 115°C, absolute vacuum of 7.99 kPa for time ranging between 0-20 minutes of frying. Moisture ratio was calculated from moisture loss data and fitted to Henderson and Pabis as it was the best fit with the data observed. The moisture content of potato fries decreased exponentially with frying time and the data was fitted into first-order kinetic model equation. The rate constant for moisture loss (kx) was calculated using first-order rate equation at 0.236 and model coefficient at 148.33. The model showed the best fit to the experimental data with R₂ of 0.98. Fat ratio was calculated from oil absorption data and

fitted to Henderson and Pabis model. The oil content of potato fries increased exponentially with frying time and the data was fitted into first-order kinetic model equation. The rate constant for fat absorption (k_y) was calculated using first-order rate equation at 0.115 and model coefficient at 62.143. The model showed the best fit to the experimental data with R_2 of 0.986.

ACRIP on PHET

Vacuum Assisted Ohmic Heating System for Pasteurization and Concentration of Non-Thermally Stabilized Fruit Juices (PAU, Ludhiana)

In order to segregate the effects of vacuum and ohmic heating on the processing time and selected quality responses, aonla juice was concentrated using ohmic heating under atmospheric conditions (OHAC; 2 L, 12.5 V/cm, 65°C), optimized conditions of ohmic heating under vacuum conditions (OHVC; 2 L, 12.5 V/cm, 65°C, 380 torr) and conventional vacuum evaporation (CVE; 2 L, 65 °C, 380 torr, no circulation) to remove same water content as that of optimized OHVC (108 mL). The results revealed that the application of vacuum during ohmic heating of aonla juice (OHVC) resulted in a process time reduction of almost 71% in comparison to ohmic Heating under Atmospheric Conditions (OHAC). The process time in OHVC was further 21 times lesser than the Conventional Vacuum Evaporation (CVE) inside a vacuum oven. Ascorbic acid was observed to be retained up to the maximum extent during OHVC conditions (14.6% reduction). Under atmospheric, ohmic heating resulted in almost 47% degradation of ascorbic acid. Under CVE, treated aonla juice had 445.98 mg/100 mL ascorbic acid (27.3% reduction).

The keeping quality of 3 types of processed and fresh aonla juice samples (optimized OHVC, optimized OHVC+US and fresh juice) was evaluated under ambient conditions. The samples were stored in amber glass and PET bottles and were monitored for change in colour attributes, ascorbic acid and total phenols at regular intervals. The highest ascorbic acid concentration was recorded in OHVC+US treatment (613 mg/100 mL) and the lowest ascorbic acid content was observed in control samples stored in glass containers (113.8 mg/100 mL) after 4 weeks. The minimum percentage degradation (7.45%) of phenols during storage was observed for OHVC+US treated aonla juice in glass containers. The synergistic processing conditions of optimized OHVC and ultrasonication treatments packaged in amber glass storage material was observed to retain total phenols better whereas similar processing conditions and PET storage material preserved ascorbic acid to the best extent during 4 weeks of ambient storage.



Concentration of aonla juice using conventional and developed system

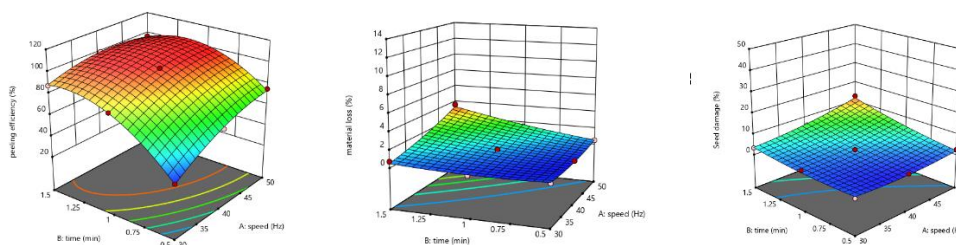
Jackfruit Seed Peeler (KAU, Tavanur)

Jackfruit (*Artocarpus heterophyllus*) is a native fruit of India cultivated as a homestead tree without any management practices. Jackfruit constitutes three main parts viz. bulb, seed and rind. Keeping the colossal waste of this nutritious seed in view, the present studies focus on making seed flour which can be stored for a longer period and find varied industrial applications. The seed coat removal is the one of the most difficult and time-consuming processes.



Jackfruit seed peeler

Performance evaluation of the machine was conducted in the laboratory to optimize the speed of peeling and minimize the material loss and percentage seed damage. The peeling action was studied at various frequencies (30 Hz, 40 Hz and 50 Hz) at different times (0.5 min, 1 min and 1.5 min). The peeling efficiency was highest (99.81%) at a frequency of 50 Hz whereas, lowest (37.7%) at a frequency 30 Hz. The highest material loss (3.6%) was observed at 50 Hz whereas, lowest (0.5%) was at 30 Hz. Frequency of 39.99 Hz was found to be optimal for peeling operation, in respect of 0.98 minutes time for higher peeling efficiency and lowest material loss. The peeling efficiency, seed material loss and percentage seed damage at optimized conditions were found to be 97.79%, 0.61% and 2.24%, respectively. The capacity of the developed machine is 22.5 kg/h.

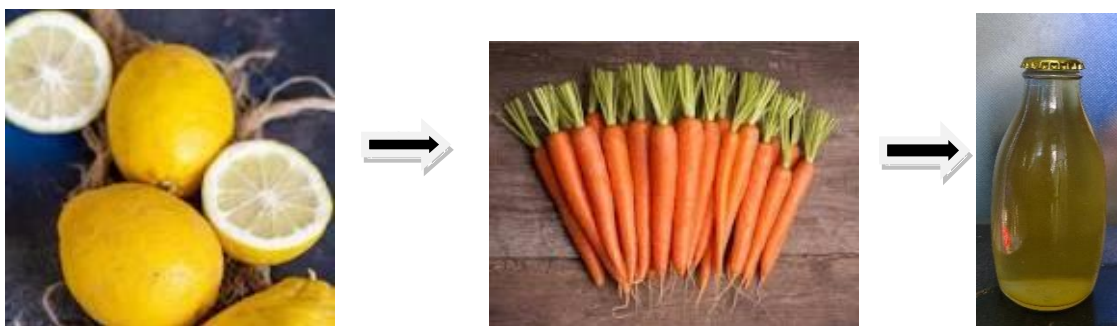


Effects of process parameters on (a) peeling efficiency (b) material loss and (c) seed damage

The maximum throughput of the machine was 22.5 kg/h whereas in manual operation 0.943 kg/h which is lesser than the mechanical operation. The average taken time for peeling was maximum (0.5 min/seed) in manual operation and in case of mechanical operation (0.033 min/seed), which is higher than manual operation. This indicated that the developed machine aids in faster peeling of jackfruit seeds with least drudgery besides more efficient and also could be used in small and medium scale industry. The cost of the developed machine was found to be Rs. 43250/-. The operational cost of the machine is Rs. 44.64/h. The benefit-cost ratio of the machine was calculated as 1.84.

Pilot Study on Unravelling the Functional Potential of Bioactive Ingredients of Underutilized Hill Lemon (*Citrus pseudo. Limon*) to Transform the Functional Value of Food (YSPUH&F, Solan)

Hill lemon is an important fruit, commonly known as “Galgal” with the great nutritional value because of its high content of acidity, ascorbic acid, minerals, flavonoids and phenolics. Besides, it is also used in preventive medicine for cold, influenza and constipation and many other diseases and human ailments. As we know that carrots are best known for their high contents of phenolics, especially carotenoids like alpha and beta-carotenes which are important precursors to vitamin A in human metabolism which is involved with the healthy development and function of the teeth, bones, skin and eyes. The blending of Hill lemon with carrot juice can be successfully used for the preparation of functional beverages enriched with the functional attributes of both commodities. Therefore, blending of carrot juice with Hill lemon juice can be an alternative to seek its nutritional properties. To prepare blended beverages, six treatments were taken with different ratios of Hill lemon and carrot juice i.e., 100:0, 90:10, 80:20, 70:30, 60:40, and 50:50. Out of 6 treatments, combination of 60:40 of Hill lemon and carrot juice was awarded with highest overall acceptability (7.79) on 9-point hedonic scale with final TSS of 10 per cent and acidity of 0.3 percent.

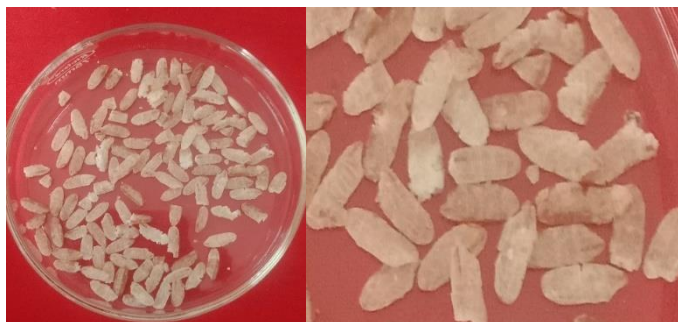


Hill lemon-carrot blended RTS

Production of Rice Flakes from Brown Rice (AAU, Jorhat)

Flaked rice has played an important role in religious ceremonies for a very long time, and it is also one of the main breakfast items in India. The existing flaking process has a number of disadvantages, such as low yield and high processing cost, long processing time and many processing steps, high waste generation, loss of thermo-sensitive nutrients, no precise control over process parameters, poor process efficiency, the inability to produce flakes from whole rice. To overcome the above-mentioned problem of the existing flaking process, flaking process was developed wherein flaked rice can easily be prepared from whole rice. To optimize the flaking conditions dehusked rice were tempered, roasted, and flaked. A central composite rotatable design was used to investigate the effect of process conditions namely tempering time (TT: 2-7 h), roasting temperature (RT_e: 90-160°C), and Roasting time (RT_i: 50-120 s) on process responses. The quality of rice flakes was evaluated in terms of such as flakiness factor (FF), flakes yield (FY), and percent of broken flakes (PBF), and overall acceptability (OAA). Response optimization using RSM revealed that the optimum values of process variables with maximum desirability function (0.822) were: 3.91 h TT, 118.4°C RT_e, and 50 s RT_i. The values of FF, FY, PBF and OAA for flakes at this process condition were predicted as 0.53, 72.23%, 28.57%, and 8.0, respectively,

which was close to observed values. The optimized process conditions (processing time, 24 h; RT_e , 220°C and RT_i , 10 min) obtained by numerical integration were found to reduce the water consumption of conventional process by 86%, 83%, 46% and 92%, respectively.



Brown rice and flakes

Low-Cost Mobile Reinforced Clay Pot Smoker for Meat and Fish (AAU, Khanapara)

Mobile smoking unit has been developed with an inner clay pot chamber. The smoking unit has two major components i.e., one external smoke generator and one smoke chamber which is built with a clay pot reinforced with an outer food grade SS Box. The external smoke generator is fitted with a 500-watt heater for burning the sawdust/ wood chips and it is connected to the smoke chamber with the help of a galvanized pipe. The external smoke generator is also equipped with a blower fan to divert the smoke to the smoke chamber. The smoke chamber is fitted with 3 heating elements. Each heating element has a capacity of 1.5 Kw and the maximum temperature attainable inside the smoke chamber is 200°C. Two meat trays are fitted inside the smoke chamber each having a capacity of 5.0 kg meat per tray. The upper lid of the smoke chamber is fitted with a fan to distribute the heat as well as smoke inside the chamber evenly.



Mobile clay pot



Side view of smoke chamber



Inner clay pot with heating element and control panel

Bio-based Freshness Indicator for Refrigerated and Frozen Meat (AAU, Khanapara)

Anthocyanins were extracted from Black Rice (*Oryza sativa* L.) variety of Assam (Upendra rice) as per standard procedure for the present study. Whatman filter paper no. 42 has been utilized to make the indicator strips of required size. The powdered extracts were diluted to different concentrations and indicator strips were immersed in those solutions. The indicator solutions containing test strips were then centrifuged at 3000 rpm for 15 min and dried overnight at 60°C. After drying, the prepared test strips were vacuum packed and stored under refrigeration till further use. For the present investigation, fresh meat pieces were packed in PET boxes and indicator strips were adhered on the inner side of the lid and sealed properly. The test boxes were then stored at refrigeration (4°C) as well as in frozen (-18°C) conditions till the indicator strips show the sign of decomposition. Simultaneously, the different physio-chemical, microbiological and sensory qualities of the stored meat in relation to colour change of the indicator strips were recorded at suitable intervals. It was found that under refrigeration, the meat samples can be stored up to 6th day of storage and the frozen meat samples can be stored up-to 6 months as indicated by the indicator strips and validated by other quality parameters.



Change of indicator colour under refrigerated condition

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EVENTS/ACTIVITIES

• ICAR North Zone Sports Tournament

ICAR-CIPHET, Ludhiana organized ICAR-North Zone sports tournament during 17-20 Jan, 2023. Twenty four teams with 900 participants participated in this tournament. The ICAR-CIPHET contingent was comprised of 59 participants including 11 women participants. The valedictory function of the North Zone sports tournament was organized at ICAR-CIPHET ground with the glory of historical performance and great joy. Ms. Ritu Kukde was the flag bearer who won the Gold Medal (100 m and 200 m race, High Jump, Long Jump, and Badminton (Single)). Total 13 medal (Gold 07, Silver 06) won by team CIPHET. Mr. Naresh Kumar, IIWBR and CIFE, Mumbai were best athlete (men). Mr. Naresh Kumar, IIWBR, Karnal and Ms. Jeena K. CIFE, Mumbai were the recognized as best athletes in male and female categories. CPRI, Shimla was the overall winner of the tournament.

S. No.	Events	1 st	2 nd
1.	100 m Men	-	Shri Krishna Nishani (13.16 sec)
2.	100 m Women	Ritu Kukde (15.71 sec)	-
3.	200 m Women	Ritu Kukde (34.82 sec)	-
4.	4x100 m Relay Women	CIPHET, Ludhiana	-
5.	Long Jump Women	Ritu Kukde (3.10 m)	Shilpa (3.09 m)
6.	High Jump Women	Ritu Kukde	Shilpa
7.	Cycle Race 5000 m	-	Devinder Kumar
8.	Badminton Men (Team)	-	CIPHET, Ludhiana
9.	Badminton Women (Single)	Ritu Kukde	Bidyalakshmi
10.	Badminton Women(Double)	CIPHET, Ludhiana	-
	Total Medal	7 Gold	6 Silver



• ICAR-CIPHET Participated in Expert Panel Discussion

ICAR-CIPHET, Ludhiana participated in an expert panel discussion titled 'Scale-Appropriate Mechanization Solutions for Smallholder Farmers in the Global South' during the 4th India Agri-Expo 2024 held at Sahnewal Ludhiana on 20 Jan, 2024. The event drew participation from 20 delegates representing African countries and 250 Indian delegates, including farmers, entrepreneurs, machine

manufacturers, and food processors, making it a comprehensive platform for collaborative discussions and insights.



● Stakeholders’ Meet

ICAR-CIPHET, Abohar conducted stakeholders meet on 31 Jan, 2024. The chief guest of this event was Dr. S.N. Jha, DDG Agri. Eng. and special guest was Dr. Nachiket Kotwaliwale, Director, ICAR-CIPHET Ludhiana. On this occasion, DDG discussed the problems faced by the new entrepreneurs and checked the product prepared by them. He encouraged them to achieve the goal of becoming successful entrepreneur in their area. Total 27 members participated in this meeting.



● National Science Day

ICAR-CIPHET celebrated National Science Day on 28 Feb, 2024. On this occasion, Dr. Digvir S Jayas, Hon’ble President and Vice-Chancellor of the University of Lethbridge, Alberta, Canada delivered a lecture on Advances in Grain Storage Management.

● International Women’s Day

The ICAR-CIPHET celebrated International Women's Day on 6 Mar, 2024 by conducting a specialized training program for 250 women farmers hailing from the districts of Barnala, Moga, and Ludhiana in Punjab. The training focused on Groundnut-based dairy analogues was conducted under the Scheduled Caste Sub-Plan (SCSP), under the Ministry of Social Justice & Empowerment, Government of India.



EXTENSION ACTIVITIES

A. Awareness Programmes

S. No.	Programme Title	Venue	Duration
1.	योग एवं प्राकृतिक चिकित्सा जागरूकता कार्यक्रम (विषय: पेट के रोगों को बिना दवाई के इलाज)	ICAR-CIPHET, Ludhiana	15 Feb, 2024

B. Trainings

Training Programme	Venue	Participants	Duration
Farmers Trainings			
Honey Processing, Branding and Marketing	ICAR-CIPHET, Ludhiana	1	24 Jan, 2024
Valorisation of Fruits and By-products through Primary and Secondary Processing		04	23-25 Jan, 2024
Processing and Value Addition of Cereals under Scheduled Caste Sub Plan (SCSP) for Four Villages Mohan Majra, Rampur Phasa, Bahrapur Bet and Mehtot under Chamkaur Sahib (Punjab)		50	29-31 Jan, 2024
Processing and Value Addition of Cereals under SCSP Scheme for Farm Women, Dist. Chamkor Sahib		50	29-31 Jan, 2024
Processing of Groundnut for Milk and Tofu under SCSP Scheme for Farm Women, Dist. Jalandhar		37	13 Feb, 2024
Microencapsulation of Neem Oil and Characterization of Encapsulated Oils under the CV Raman Fellowship for African Countries		01	23 Jan - 22 Feb, 2024
Student Trainings			
Introduction to Post Harvest Engineering and Technology for M. Tech. (Agril. Process. & Food Engg.) students from Acharya N.G. Ranga Agricultural University, Dr. NTR College of	ICAR-CIPHET, Ludhiana	02	11 Dec, 2023-10 Jan, 2024

Agricultural Engineering, Andhra Pradesh			
Introduction to Post Harvest Engineering and Technology for B Tech. (Agril. Engg.) students from Central Institute of Technology Kokrajhar (Deemed to be University, MHRD, Govt. of India), Assam	ICAR-CIPHET, Ludhiana	05	22 Dec 2023 to 12 Jan 2024
Training of B.Tech (Food Tech) students from Tal-Vaibhavwadi, Dist-Sindhudurg (MH)	ICAR-CIPHET, Ludhiana	03	1-31 Jan, 2024
Officers Trainings			
Good Storage Practices of Minor Forest Produce for Chhattisgarh State (for Technical Staff of CGMFPPed)	ICAR-CIPHET, Ludhiana	08	28-31 Jan, 2024



C. Visits

S. No.	College/Institute	No of visitors	Date of Visit
1.	Kerala Agricultural University	106 (S) +4 (O)	22 Jan, 2024
2.	ADC along with other line officers from Dist. Moga	22 (O)	01 Feb, 2024
3.	Visitors form MAGNET Project, Govt. of Maharashtra	4 (O)	07 Feb, 2024
4.	Department of Extension Education and Communication Management, College of Community Science, PAU	30 (S) + 2 (O)	08 Feb, 2024
5.	ATMA, Bharatpur, Rajasthan	48 (F)	09 Feb, 2024
6.	ATMA, Hanumangarh, Rajasthan	35 (F)	
7.	College of Horticulture, Junagadh Agricultural University, Gujarat	65 (S)	13 Feb, 2024
8.	College of Agriculture, Kerala Agriculture University	110 (S) + 8 (O)	17 Feb, 2024
9.	Gram Vishwas Farmers Producer Co. Ltd., Bidar, Karnataka	10 BODs	26 Feb, 2024
10.	Dr. L.D. Singla, Director, Human Resource Management Centre, GADVASU	Newly recruited faculties	

11.	College of Agriculture, GKVK, Bangalore	61 (S) + 2 (O)	29 Feb, 2024
12.	Navsari Agricultural University, Gujarat	60 (S) + 4 (O)	15 Mar, 2024

*S-Students, O-Officials, F-Farmers

D. Mela/ Exhibitions

S. No.	Mela/ Exhibitions	Venue	Duration
1.	India Agri Progress Expo-2024	Ludhiana Exhibition Centre, Sahnewal, Ludhiana	19-21 Jan, 2024
2.	Environment Conservation Fair - 2024	Nehru Rose Garden, Ludhiana	03-04 Feb, 2024
3.	Regional Agriculture Fair for Eastern Region 2024	Krishi Vigyan Kendra Campus, Khunti, Jharkhand	03-05 Feb, 2024
4.	North Zone Regional Agricultural Fair-2024	Rani Lakshmi Bhai Central Agricultural University, Jhansi (UP)	06-08 Feb, 2024

KVK ACTIVITIES

A. Awareness Programmes

S. No.	Programme Title	Venue	Number of Beneficiaries	Dates
1.	CRM Demonstrations Field Data Collection under CRM Demonstrations	Village Khui Khera & Khippan wali	67	Sep, 2023- Apr, 2024
2.	Exhibition on Foundation Day of ICAR-ATARI, Zone-1	ICAR-ATARI, Ludhiana	157	11 Jan, 2024
3.	<i>Viksit Bharat Sankalp Yatra</i>	161 Villages of District Fazilka	7062	16 Dec, 2023 -15 Jan, 2024
4.	Awareness Program on Women's Day	Chirag Dhani, Jalalabad	110	08 Mar, 2024

B. Farmer/ Exposure Visits

S. No.	College/Institute	Number of Visitors	Date
1.	Govt. Agri. College Sriganaganagar	45 (S)	9 Jan, 2024
2.	Punjab Agricultural University, Ludhiana	21 (S)	9 Jan, 2024
3.	ATMA Deptt. Sriganaganagar	47 (F)	15 Jan, 2024
4.	KVK Sangaria under SCSP Scheme	46 (FW)	02 Feb, 2024
5.	Govt. Sen. Sec. School, Khiappan Wali	138 (S)	05 Feb, 2024
6.	Govt. Girls Sen. Sec. School, Abohar	145 (S)	
7.	Govt. High School, Abohar	40 (S)	
8.	Govt. Sen. Sec. School, Khuian servar	90 (S)	
9.	Govt. Sen. Sec. School, Saiyad Wala	45 (S)	12 Feb, 2024

10.	SHG Women under RGR Cell PAU visited at KVK and Regional Station ICAR-CIPHET, Abohar	39 (FW)	15 Feb, 2024
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*S-Students, F-Farmers, FW-Farm women



C. Trainings

S. No.	Training Title	Number of Participants	Duration
1.	EDP on Economic Empowerment of Farmers and Entrepreneurs through Value Addition of Aonla	1	9-14 Jan, 2024
2.	Skill Development Training for Rural Women through <i>Masala Making</i> (Sponsored by RGR Cell, PAU) at KVK Premises	32	15-16 Feb, 2024
3.	Training on Beekeeping at KVK Premises	29	20-22 Feb, 2024

4.	Training on <i>Poshan Vatica</i> Management at Kundal Village	50	26 Feb, 2024
5.	Awareness camp cum Training Program for SC farmers on Processing and Value Addition of Fruits and Vegetables at KVK Premises	292	11-15 Mar, 2024



OTHER ACTIVITIES

Participation in Conferences/ Seminar/ Symposia/ Workshop/ Meetings

Name of the Official	Title of the Programme	Name of Conference/ Seminar/ Symposia/ Workshop/ Meetings	Organized by	Dates
Dr. Vikas Kumar	Role of PT and ILC in maintaining accreditation as per the ISO 17025:2017	Role of PT and ILC in maintaining accreditation as per the ISO 17025:2017	National Institute of Plant Health Management, Hyderabad	10 Jan, 2024
Dr. Amit Nath Dr. Arvind Kumar Dr. Ramesh Kumar Dr. Mahesh Kumar	Exhibition on Kinnow <i>Kisan Mela</i>	Exhibition, Kinnow <i>Kisan Mela</i>	RRS, PAU, Abohar	24 Jan, 2024

Samota Dr. Rupender Kaur				
Dr. Ravi Prakash	FAD 33 Sectional Committee Meeting (online)	Dairy Equipment Sectional Committee, FAD 33	Bureau of Indian Standards (BIS) Manak Bhawan, New Delhi	02 Feb, 2024
Dr. Ranjeet Singh	Dissemination Summit-2024 held under the STREE Program	Dissemination Summit-2024 held under the STREE Program	GT Bharat and HDFC Parivartan at Guru Nanak Bhawan, Ludhiana	05 Feb, 2024
Ms. Surya Tushir	Oral presentation on Optimization of Laccase Enzyme Production in <i>Trametes versicolor</i> VSRK01 using One-Factor-at-a-Time approach	National conference on "Microbial Bioprospecting: Exploration and Conservation	Govt. V.Y.T. PG Autonomous College, Durg (C.G.) in association with Microbiologist Society	5-6 Feb, 2024
Dr. Amit Nath Dr. Arvind Kumar Ahlawat	Exhibition on Ber Day	Exhibition	CIAH, Bikaner	08 Feb, 2024
Dr. Deepika Goswami	FAD 16 Sectional Committee Meeting	26th Meeting of Foodgrains, Allied Products & Other Agricultural Produce	Manak Bhawan, New Delhi	20 Feb, 2024
Dr. Sandeep Mann Dr. Shilpa S Selvan	Annual Workshop	XIX Annual Workshop of AICRP on PEASEM	MPUAT, Udaipur and CIPHET, Ludhiana	22-23 Feb, 2024
Dr. Manju Bala Dr. Swati Sethi	Sectional Committee: FAD 28-Test methods for food products	Sectional Committee: FAD 28	Through online mode held at Manak Bhawan, New Delhi	29 Feb, 2024
Dr. Arvind Kumar	Scientific Advisory Committee Meeting	SAC Meeting of KVK	KVK, Taran Taran	19 Feb, 2024
	Review meeting with Punjab KVKs	Online	ATARI Zone -1	01 Mar, 2024
	ICAR bayer Crop Science Collaboration			12 Mar, 2024
Dr. Ravi Prakash	50th Dairy Industry	Young Professionals	Indian Dairy	4-6 Mar,

	Conference	Presentations	Association	2024
Dr. Arvind Kumar	Attended Cotton training program	Awareness and extension services on best farm practices for cotton farmers to improve yield, quality, and sustainability	RRS, PAU, Abohar	06 Mar, 2024
Sh. Rajesh Kumar, ACTO				
Sh. Pritvi Raj, ACTO				
Dr. Amit Nath	Annual Review Workshop	Stakeholder review meet & capacity building program	NABARD, Jaipur	08 Mar, 2024
Dr. Mahesh Kumar Samota				
Dr. Sandeep Mann	39 th Annual Workshop of AICRP on PHET	Annual workshop on Post-Harvest Engineering and Technology	ICAR-CIPHET, Ludhiana	13-15 Mar, 2024
Dr. Renu Balakrishnan				
Ms. Soumya Mohapatra				
Dr. Shilpa S Selvan				
Dr. Amit Nath				
Dr. Renu Balakrishnan Ms. Soumya Mohapatra	Annual Workshop of CRP on SA	Workshop	LCPC, CRP on SA	16 Mar, 2024

AWARDS & RECOGNITIONS

Name of the Awardee	Name of Award	Awarded from	Date
Dr. Ramesh Kumar	First position for Kinnow pomace fruit bar in Kinnow show	PAU, Regional station, Abohar	23-24 Feb, 2024

HUMAN RESOURCE DEVELOPMENT

S. No.	Staff name	Title of the programme	Venue	Dates
1.	Ms.Soumya Mohapatra	Training and Experience sharing Workshop on Modelling STATA for Agricultural Economics and Policy Research	IFPRI & ICAR-NIAP	3-4 Jan, 2024
2.	Dr. Poonam	Role of PT and ILC in Quality Assurance and Maintaining Accreditation as per the ISO 17025:2017” organized by National Institute of Plant Health Management, Hyderabad	Online at ICAR-CIPHET, Ludhiana	10 Jan, 2024
3.	Er. Sunita Thongam	Winter School training programme on Artificial Intelligence on Water Resource	CoAE&FT, PAU	18 Jan- 7 Feb, 2024

		Management in Agriculture'		
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PATENT GRANTED/FILED

S.No.	Title	Application No.	Inventors	Date of grant/filing	Patent Number
1.	Mechanized system for removing stalks of dry red chillies (<i>Capsicum annum L.</i>)	201811044800	Dr. Kirti Jalgaonkar, Dr. Manoj Mahawar, Dr. RK Vishwakarma	01 Feb, 2024	506110
2.	Grader for oblong and round fruits and vegetables	201611018794	Dr. RK Vishwakarma, Dr. VE Nambi, Dr. RK Gupta, Dr. Ramesh Kumar	14 Mar, 2024	525353
3.	Photocatalytic reactor for ethylene degradation	202411005249	Dr. Bhupendra M Ghodki, Dr. Poonam Choudhary	25 Jan, 2024	-

PERSONALIA

Name of the official	Date of joining/ transfer/ promotion/ retirement	Designation
Mr. Hardev Singh Sekhon	Retired from regular service on 31 Jan, 2024	TO

ICAR-CIPHET in NEWS

दैनिक सवेरा
TODAY'S NEWS

राष्ट्रीय किसान दिवस पर चौ. चरणसिंह को किया याद
सरकार द्वारा संघलित विभिन्न योजनाओं, एगमार्क ई-मार्केटिंग की जानकारी दी

राष्ट्रीय किसान दिवस के अवसर पर चौ. चरणसिंह की याद में कार्यक्रम आयोजित किया गया। इस दौरान सरकार द्वारा विभिन्न योजनाओं और एगमार्क ई-मार्केटिंग की जानकारी दी गई।

दैनिक सवेरा
TODAY'S NEWS

स्वरोजगार के लिए लघु उद्योग स्थापित करें किसान : डा. नचिकेत कोतवाली वाले

किसानों के लिए स्वरोजगार के अवसर सृजित करने के लिए लघु उद्योग स्थापित करने की सलाह दी गई। डा. नचिकेत कोतवाली वाले ने इस अवसर पर किसानों को प्रोत्साहित किया।

दैनिक सवेरा
TODAY'S NEWS

किसानों को बड़ा प्लेटफार्म मुहैया करवाएगा सीफेट : डा. नचिकेत कोतवाली वाले

सीफेट पॉरिसर में इस्वी वैज्ञानिक संसलदाहण संमिति में शामिल अधिकारी व अन्य। डा. नचिकेत कोतवाली वाले ने किसानों को सीफेट प्लेटफार्म का उपयोग करने का अवसर प्रदान किया।

Hindustan Times

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News / Cities / Chandigarh / Ludhiana: ICAR-CIPHET joins hands with Chattisgarh...

Ludhiana: ICAR-CIPHET joins hands with Chattisgarh firm

By HT Correspondent, Ludhiana
Jan 30, 2024 06:34 AM IST

The central theme of the training programme revolved around equipping CGMFPEd's technical staff with the latest knowledge and techniques in secure storage



Officials of ICAR-CIPHET and Chattisgarh Minor Forest Produce Federation during an event in Ludhiana. (HT)

ICAR-CIPHET holds cereal processing and value-addition training for empowering women

PUNJABI EXPRESS BUREAU Ludhiana, January 31

To enhance the economic prospects of rural women, a three-day training programme on processing and value addition of cereals held at the Central Institute of Post-Harvest Engineering and Technology (CIPHET), PAU, Ludhiana, under the Scheduled Caste sub-plan.

The training was provided on January 29 to 31 to the 50 women beneficiaries selected from Chamkaur Sahib of Rupnagar district focusing on post-harvest management. The collaborative initiative brought together Grant Thornton Bharat, HDFC Parivartan Project, and ICAR-CIPHET Ludhiana. The event commenced with the registration of female beneficiaries, followed by an inaugural ceremony that shed light on CIPHET's significant contributions to post-harvest activities and its various services. Dr Nachiket Kotwalwale, Director of ICAR-CIPHET, emphasized the institute's role in ensuring sustainable livelihood security for rural community followed by various training sessions.



सीफेट एवं बंधारों के लिए किसानों के लिए एगमार्क ई-मार्केटिंग के अवसर पर कार्यक्रम आयोजित।

डिंड रोज़ा मिधलाही पुरोगाम दी समाप्यती

पंजाब पुरोगाम मिधलाही... डिंड रोज़ा मिधलाही पुरोगाम की समाप्यती के अवसर पर कार्यक्रम आयोजित किया गया। इस दौरान मिधलाही पुरोगाम के बारे में जानकारी दी गई।

दैनिक सवेरा
TODAY'S NEWS

किसानों को बड़ा प्लेटफार्म मुहैया करवाएगा सीफेट : डा. नचिकेत कोतवाली वाले

सीफेट पॉरिसर में इस्वी वैज्ञानिक संसलदाहण संमिति में शामिल अधिकारी व अन्य। डा. नचिकेत कोतवाली वाले ने किसानों को सीफेट प्लेटफार्म का उपयोग करने का अवसर प्रदान किया।

दैनिक सवेरा
TODAY'S NEWS

लुधियाना भास्कर 19/1/2024

200 मीटर दौड़ में लुधियाना की रितु ने जीता गोल्ड
आईसीएआर जोनल स्पोर्ट्स टूर्नामेंट में रियलाइटीयों का अच्छा रखा प्रदर्शन

भास्कर न्यूज़ | लुधियाना

लुधियाना भास्कर

लुधियाना, 19 जनवरी, 2024 | 4

आईसीएआर जोनल स्पोर्ट्स टूर्नामेंट में लुधियाना टीम का रहा दबदबा



दौड़ में आईआईडब्ल्यूबीआर के नरेश पहले स्थान पर रहे। आईसीएआर-सीफेट लुधियाना की ओर से स्पोर्ट्स कॉम्प्लेक्स पीएचयू में शुक्रवार को आईसीएआर जोनल स्पोर्ट्स टूर्नामेंट उत्तर भारत के 24 संस्थानों के 800 से अधिक प्रतिभागियों के बीच जारी रहा। बैडमिंटन युगल में सीफेट लुधियाना विजेता रहा और सीआईएफई मुंबई उपविजेता रहा। सीफेट लुधियाना ने ऊँची कूद (महिला) में स्वर्ण और रजत पर कब्जा किया। महिलाओं की 100 मीटर दौड़ में सीफेट लुधियाना की रितु ने पहले और दूसरे व तीसरे स्थान में सीपीआईआई शिमला विजेता और डीएनआर सोलन उपविजेता रहा।



Contact: ICAR-CIPHET
Behind Radha Swami Satsung Ghar,
Hambaran Road, Ludhiana-141004 (Punjab)
Website: www.ciphnet.icar.gov.in
Ph. No. 0161-23131103, 2313116
Fax: 0161-2308670
E-mail: hdtot.ciphnet@icar.gov.in
icarciphnetnewsletter@gmail.com



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